Efficient Movement of Goods

Tangible Result Driver – Dave DeWitt,
Deputy Administrative Officer

Missouri's location in the nation's center makes it a major cross-roads in the movement of goods. Transportation infrastructure must be up to the task so that as the flow of freight becomes more efficient, businesses and communities share the economic benefits.

Efficient Movement of Goods

Freight tonnage by mode

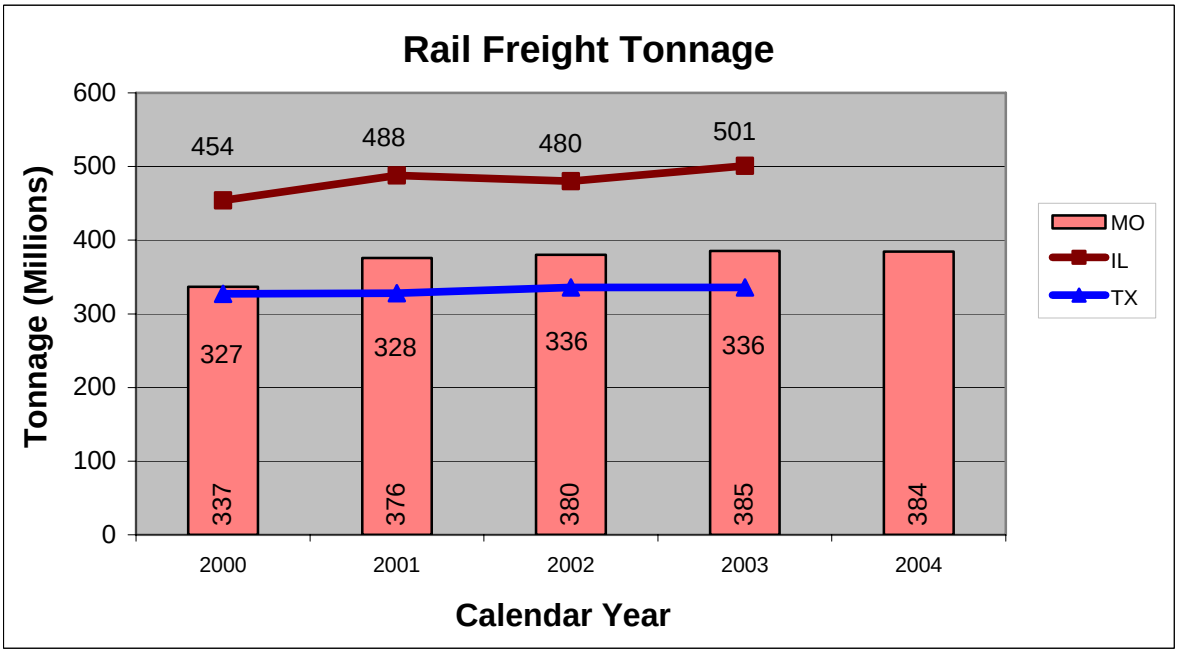
Result Driver: Dave DeWitt, Deputy Administrative Officer
Measurement Driver: Brian Weiler, Multimodal Operations Director

Purpose of the Measure:
The measure tracks trends and indicates diversification of freight movement on Missouri's transportation system.

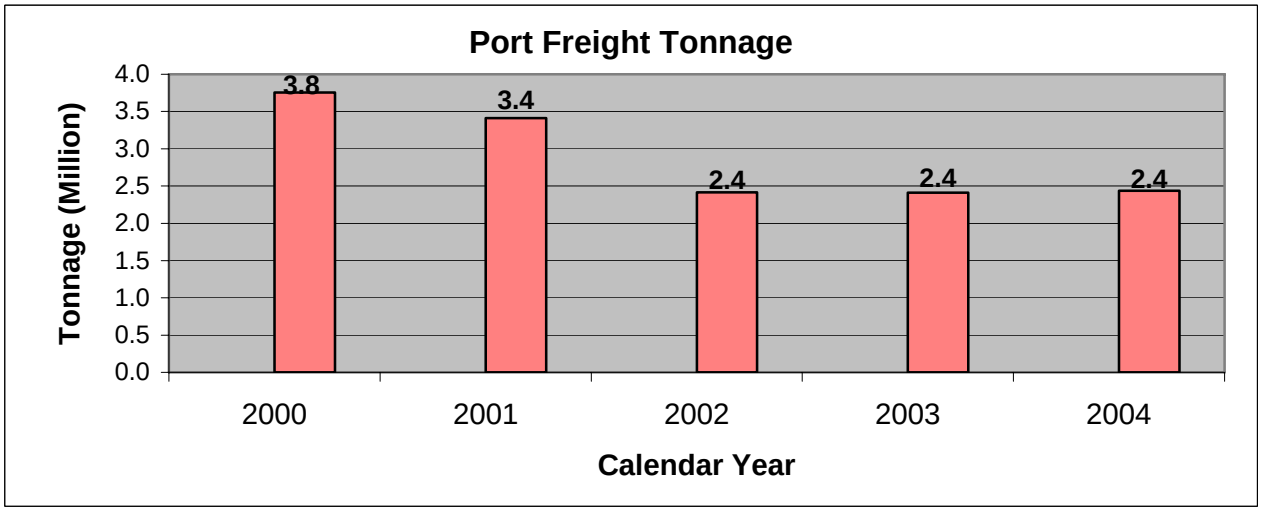
Measurement and Data Collection:
Port tonnage is reported to MoDOT from public ports. Air cargo data is collected via mail survey to commercial airports with known cargo activity. Rail tonnage is obtained from the Association of American Railroads. MoDOT calculates motor carrier freight movement using commercial vehicle miles traveled, trip length per shipment, and average truck cargo weight.

Improvement Status:
Total freight tonnage for all modes exceeds 1.2 billion tons, which reflects positive economic growth and development for the State of Missouri. Rail freight demand is strong, but tonnage has remained relatively steady due to a rail labor shortage and system capacity issues. Missouri does not currently invest public funding in private rail infrastructure, but MoDOT has supported efforts to remove rail system bottlenecks, such as the KC Flyover Project and adding a second bridge on the Union Pacific mainline over the Osage River. Motor carrier freight tonnage has experience steady growth since 2001. MoDOT has implemented several process improvements and outreach efforts to streamline motor carrier registration and inspection services.

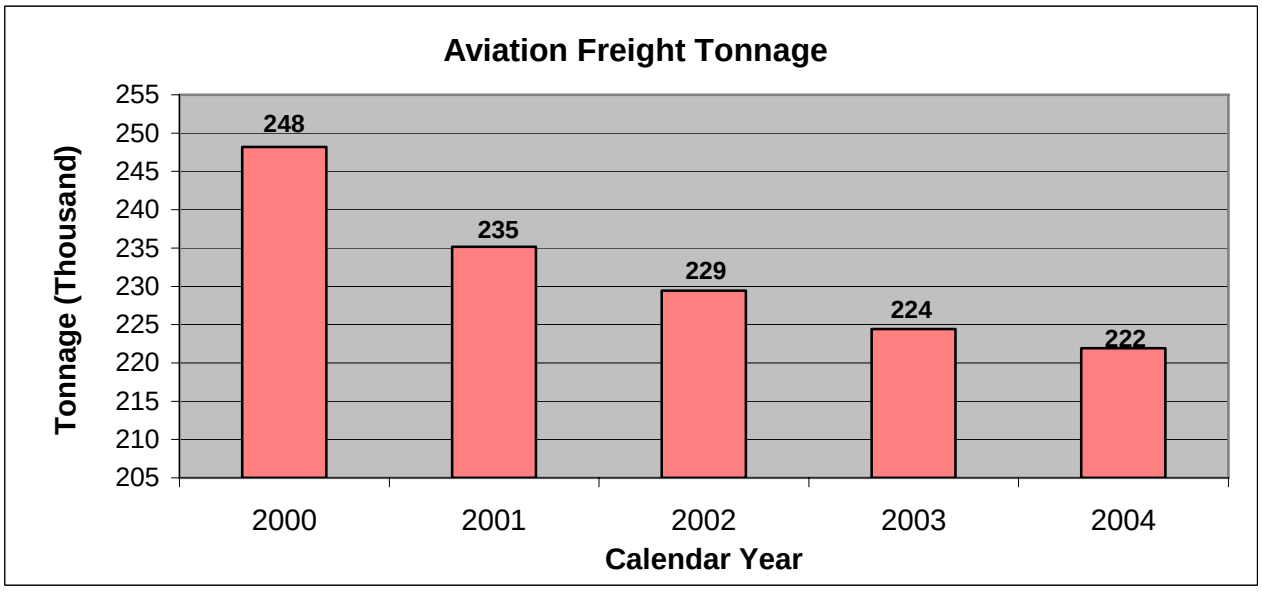
Port tonnage continues to be impacted by low flows on the Missouri River and an inadequate lock and dam system on the Upper-Mississippi River. MoDOT supports a federal proposal from the Corps of Engineers to update and expand this system, which is currently being considered by Congress. Aviation tonnage continues to be impacted by a down turn in the aviation industry from 9-11 and the resulting financial impacts to airlines, which carry a significant portion of air cargo. Commercial airports fall under the jurisdiction of the FAA, but MoDOT's Aviation Advisory Committee helps identify ways to better support the commercial aviation industry.



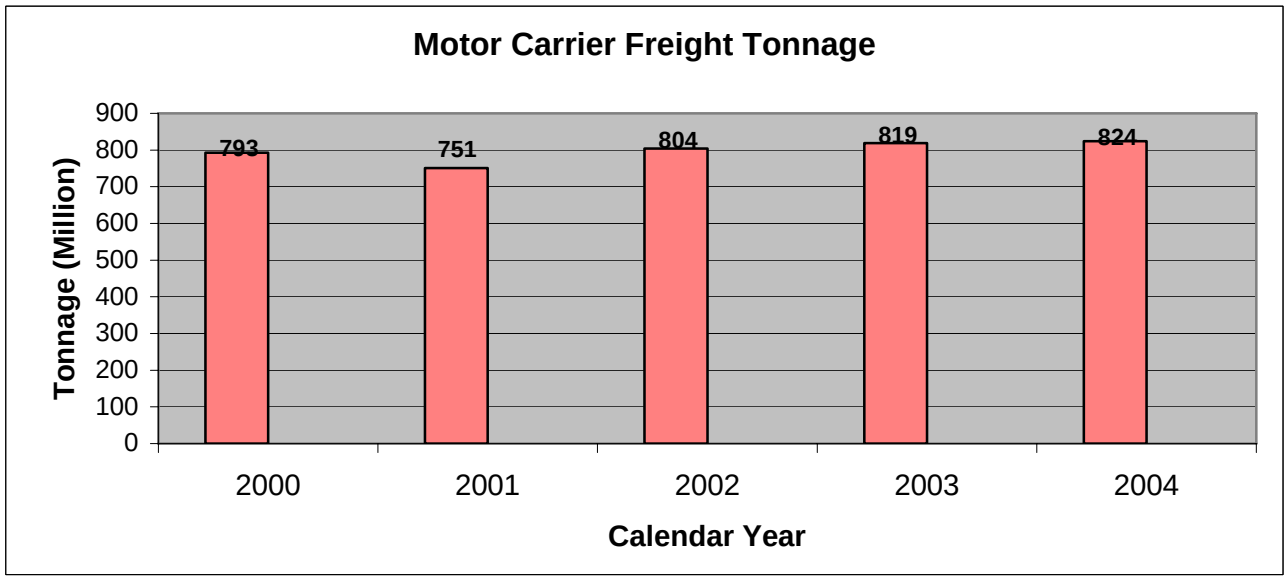
** Missouri information for 2004 is based on preliminary numbers. Data for Illinois and Texas is not available for 2004.*



Desired Trend:



Desired Trend:



Desired Trend:

Efficient Movement of Goods

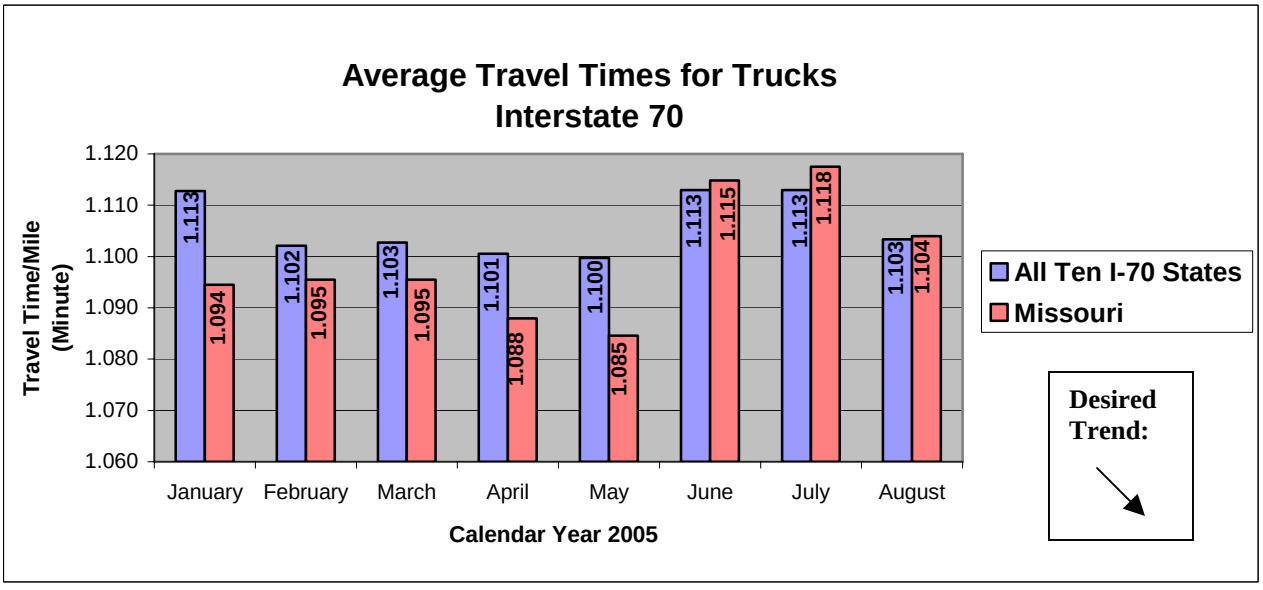
Average travel times for trucks on selected roadway sections

Result Driver: Dave DeWitt, Deputy Administrative Officer
Measurement Driver: Michelle Teel, Technical Support Engineer

Purpose of the Measure:
This measure tracks average truck travel times on selected roadway sections. Monitoring travel time is a tool for improving transportation system performance. MoDOT recognizes that the efficient movement of trucks is critical to the economy. Timely, reliable goods movement allows businesses to reduce manufacturing and inventory costs and to improve responsiveness to rapidly changing markets and consumer desires.

Measurement and Data Collection:
The Federal Highway Administration (FHWA) launched the Freight Performance Measure initiative to monitor travel times in freight-significant corridors, including Interstate 70. In 2002, FHWA established a partnership with the American Transportation Research Institute (ATRI) to determine whether and how information from communications technologies used by the freight industry could provide data to support freight performance measures. ATRI worked with technology vendors and commercial carriers to demonstrate that location data from communications technologies can be used to derive measures of travel time. After removing all information except time and location from the satellite data stream, ATRI measured average travel rates. The data provided is preliminary research data from FHWA. The reported average travel rate (speed) has been converted to travel time per mile. Future FHWA research may explore the use of other technologies, such as electronic toll collection and weigh-in-motion equipment.

Improvement Status:
To help improve truck travel time, live traffic data for three Missouri metro areas is available on MoDOT's website at www.modot.gov in the Services Section under Traveler Services. Kansas City Scout provides traffic information for Kansas City, Gateway Guide provides traffic information for St. Louis, and Ozarks Traffic provides traffic information for Springfield. Preliminary research data including truck travel times is available from FHWA on Interstate 70 across the nation. This data allows us to measure Missouri's truck performance on Interstate 70 as compared to the entire Interstate 70 corridor. Due in part to an increase in the number of Missouri work zones this summer, travel times increased slightly in June through August. The desired trend is a reduction in average travel times, as long as it they do not exceed the posted speed limit.



Efficient Movement of Goods

Percent of trucks using advanced technology at Missouri weigh stations

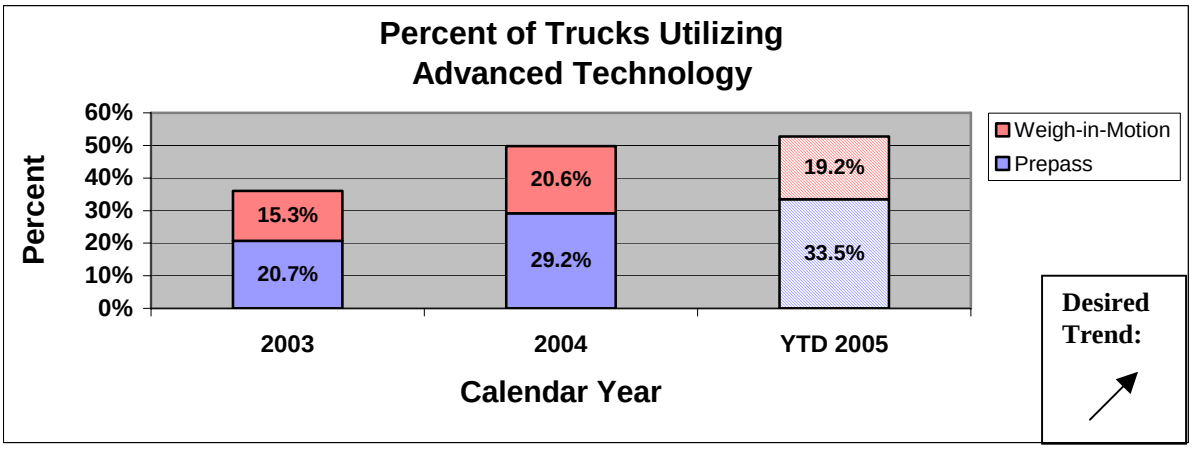
Result Driver: Dave DeWitt, Deputy Administrative Officer
Measurement Driver: Barbara Hague, Special Project Coordinator

Purpose of the Measure:
This measure indicates motor carriers' acceptance of tools designed to improve the flow of freight traffic on Missouri highways.

Measurement and Data Collection:
Data is collected by HELP, Inc.'s PrePass system computers which scan transponder-equipped vehicles as they approach 19 Missouri weigh stations. Pavement sensors check the vehicle's weight while computers review MoDOT's records to determine the carrier's compliance with safety, insurance and other state and federal regulations. Drivers are notified to stop or are allowed to continue without delay. Carriers that comply with state and federal regulations save time and money. The Missouri State Highway Patrol provides a quarterly measure of the number of trucks that use Missouri's weigh-in-motion scales located at Mayview and Foristell. These scales measure weight as trucks pass over them at 40 m.p.h. Using ramp scales rather than verifying weight on fixed scales that require a full stop saves both time and money.

Improvement Status:
The number of trucks using PrePass increased to 33.5 percent. This is the result of a 12.8 percent increase in the percent of transponder-equipped vehicles traveling in Missouri during the first three quarters of 2005. Of the twenty-four states participating in the PrePass program, Missouri ranks fourth in the number of advanced technology sites and third in the number of vehicles traveling through these technology sites. MoDOT recognizes the benefits of the PrePass program and is reaffirming its Memorandum of Understanding with the Missouri State Highway Patrol and Help, Inc. Through the MOU, the MSHP takes care of minor maintenance on the ramp sorters.

The eastbound Foristell weigh-in-motion scale was closed during the third quarter of 2005 while a computerized system was replaced. During the repair, drivers who would normally use the weigh-in-motion scale to save time were required to stop at fixed scales. Through educational outreach and publications, MCS promotes usage of the PrePass technology to the motor carrier industry.



Efficient Movement of Goods

Interstate motor carrier mileage

Result Driver: Dave DeWitt, Deputy Administrative Officer
Measurement Driver: Joy Prenger, Accounting Services Supervisor

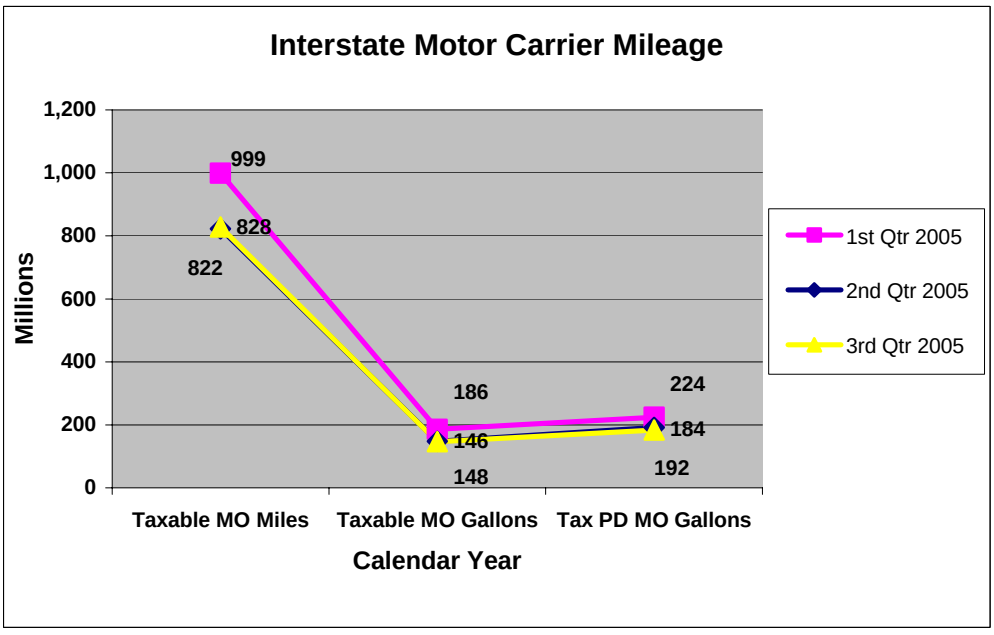
Purpose of the Measure:
This measure determines if motor carrier freight travel in Missouri is increasing or decreasing during specific quarters of the year. Data could also indicate fluctuations of freight movement in Missouri. Information received provides direction on how to strengthen and increase the program to facilitate freight movement by monitoring the quarterly fuel tax rate(s) and voluntary compliance.

Measurement and Data Collection:
Data is collected quarterly. Total taxable miles traveled in Missouri by Missouri-based carriers and carriers based in IFTA (International Fuel Tax Agreement) member jurisdictions is tracked utilizing IFTA tax returns and member jurisdiction monthly transmittals. This information is used to reflect freight movement, support revenues and track usage from the motor fuel tax refund appropriation.

Improvement Status:
Diesel prices are a reported $0.968 cents higher than a year ago. The Midwest fuel price average is $3.144 a gallon compared to the national average of $3.148 a gallon. Due to the rising fuel prices, it is estimated that our desired trend will be adversely affected. It is reported through the American Trucking Association (ATA) and the Federal Highway Administration that the motor carrier industry burns an estimated 665 million gallon of diesel each week. A survey is being conducted by the ATA to find out how increased diesel prices are affecting the trucking industry's profits, if it is changing freight movement and how is the industry coping.

In January 2006, Motor Carrier Services will be providing taxpayers access to their fuel tax account(s) through our web-based system. We expect tax return errors to decrease due to an automated calculation process, thus creating more accurate reporting and collections.

MCS is currently surveying our eight border states to determine if they are able to raise quarterly fuel tax rates without changing rules or regulations. Missouri's quarterly rate is set by state statute.



Desired Trend: ↗

Efficient Movement of Goods

Percent of satisfied motor carriers

Results Driver: Dave DeWitt, Deputy Administrative Officer
Measurement Driver: Mary Jo Pointer, Motor Carrier Manager

Purpose of the Measure:
This measure tracks MoDOT's progress toward the goal of expeditiously meeting the needs of the motor carrier industry and facilitating freight movement. MoDOT's Motor Carrier Services team uses the data to identify opportunities to improve customer satisfaction.

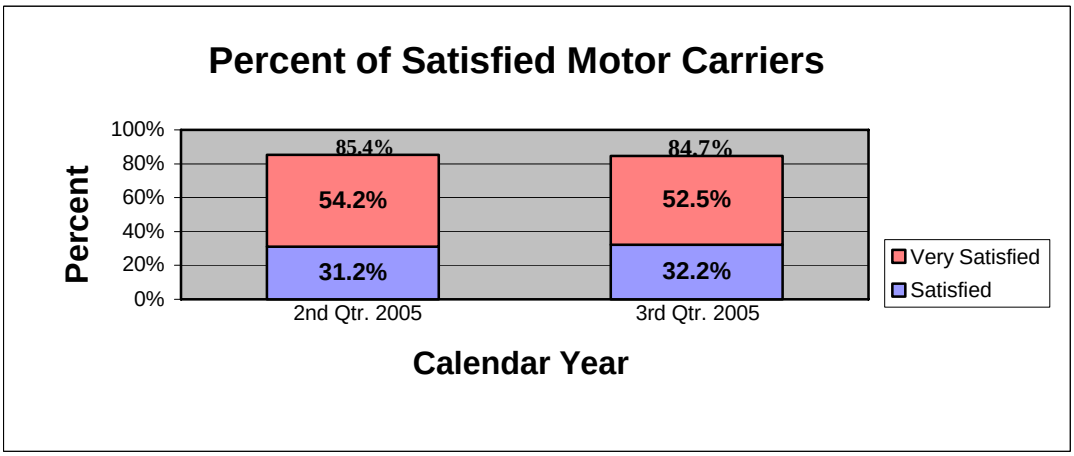
Measurement and Data Collection:
MCS personnel, working with the Missouri Transportation Institute, developed a survey to collect customer satisfaction data. A single survey addressed all four MCS program divisions, International Registration Plan/International Fuel Tax Agreement, Over-dimension/Over-weight Permitting, Safety and Compliance and Operating Authority. Survey respondents identified the service(s) they use when doing business with MCS, then indicated their level of satisfaction with 12 customer service factors such as "timely response", "friendly", "respectful", and "outcome". They also gave an "overall satisfaction" score. Customers used a four-point scale ranging from 4=Very Satisfied to 1=Very Dissatisfied.

Improvement Status:
Overall MCS customer satisfaction continues to be high with 84.7 percent of respondents reporting that they were "satisfied" or "very satisfied" with MCS customer service. There is slight decrease in the number of responses from the second quarter.

Strong areas of customer service include "helpfulness", "concurrence with policy", "returning phone calls/emails", "outcomes" and "how issues are resolved". Satisfaction levels were lowest with "timely response", mainly because of extreme wait times experienced by OD/OW customers.

To improve timely response issues, MCS implemented numerous improvements including:

- A staggered registration schedule has been implement and 53% of the carriers chose this option.
- Dedicated staff to contact OD/OW customers before MCS working hours to issue permits and designated a central staff contact for incoming calls from district offices.
- Added staff to the OD/OW team to manage the extremely high call volume.
- Phasing in the transaction of business through the Internet-based system.



Efficient Movement of Goods

Average wait time spent by customers obtaining over-dimension / over-weight permits

Result Driver: Dave DeWitt, Deputy Administrative Officer
Measurement Driver: Mary Jo Pointer, Motor Carrier Manager

Purpose of the Measure:
This measure tracks MoDOT Motor Carrier Services' success in minimizing the time it takes motor carriers to obtain permits that allow them to haul loads that are taller, wider, longer or heavier than those regularly permissible on Missouri highways.

Measurement and Data Collection:
Using the WebView database to gather call center data, MCS calculates the average customer wait time on the phone (called "in queue") plus the average length of time speaking to a MCS agent to obtain a permit. In the future, MCS will also collect wait time data from both telephone requests and the Internet-based permit ordering system. Benchmark data is scarce as other states do not currently track wait time data.

Improvement Status:
During the third quarter of 2005, MCS received a total of 13,412 calls from OD/OW customers and 10 agents issued 39,274 permits. The average time the customer waited in queue was 3 minutes, 33 seconds. The average time the caller spent with the agent to complete the transaction was 7 minutes, 52 seconds, resulting in an average of 11 minutes, 25 seconds to obtain an OD/OW permit.

To decrease the average amount of time it takes a customer to obtain an OD/OW permit, MCS has implemented the following:

- Dedicated staff to contact OD/OW customers before MCS working hours to issue permits and designated a central staff contact for incoming calls from district offices.
- Added staff to the OD/OW team to manage the extremely high call volume.
- Phasing in the transaction of business through a new Internet-based system.
- New rules approved by the Commission that will allow the carriers to obtain permits for new different types of load configurations.
- MCS is open for business on six 2005 state holidays.